
烽火通信天线类

物料规格书

SPECIFICATION FOR APPROVAL

Antenna P/N: RFA1650CBB01B

Antenna Printing: RF01B2A 224

Antenna Description: 2.4G 5dBi 白色天线 220mm

Model NO: SR1041HF

Revision: R_A

Date: 2022-03-19

制订 Prepared	审核 Checked	核准 Approved	烽火验收 Accepted
黄磊	杨堡钧	姚定军	

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Version	Date	Description	Author
RA	2022-03-19	New Release	黄磊

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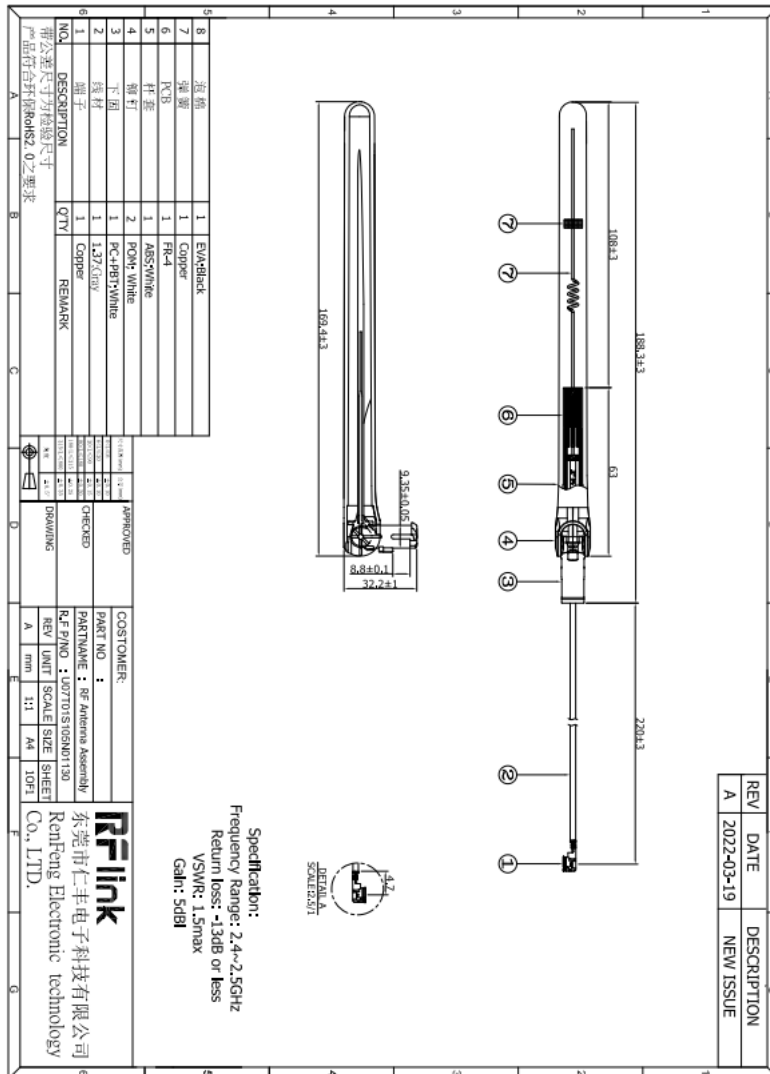
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一、Electrical Performance

WIFI(可选, 不涉及可删除)

主要技术指标		Main technical specifications	
频率范围 (MHZ)	2400~2500	Frequency Range (MHZ)	2400~2500
特性阻抗(Ω)	50	Impedance(Ω)	50
增益(dBi)	5 $\pm$ 1	Peak Gain(dBi)	5 $\pm$ 1
输出电压 驻波比	≤ 1.5	VSWR	≤ 1.5
极化方式	垂直极化	Polarization	Linear,Vertical
方向性	全向性	Radiation	Omni-directional

二、Dimensions



备注:

外置天线要求:

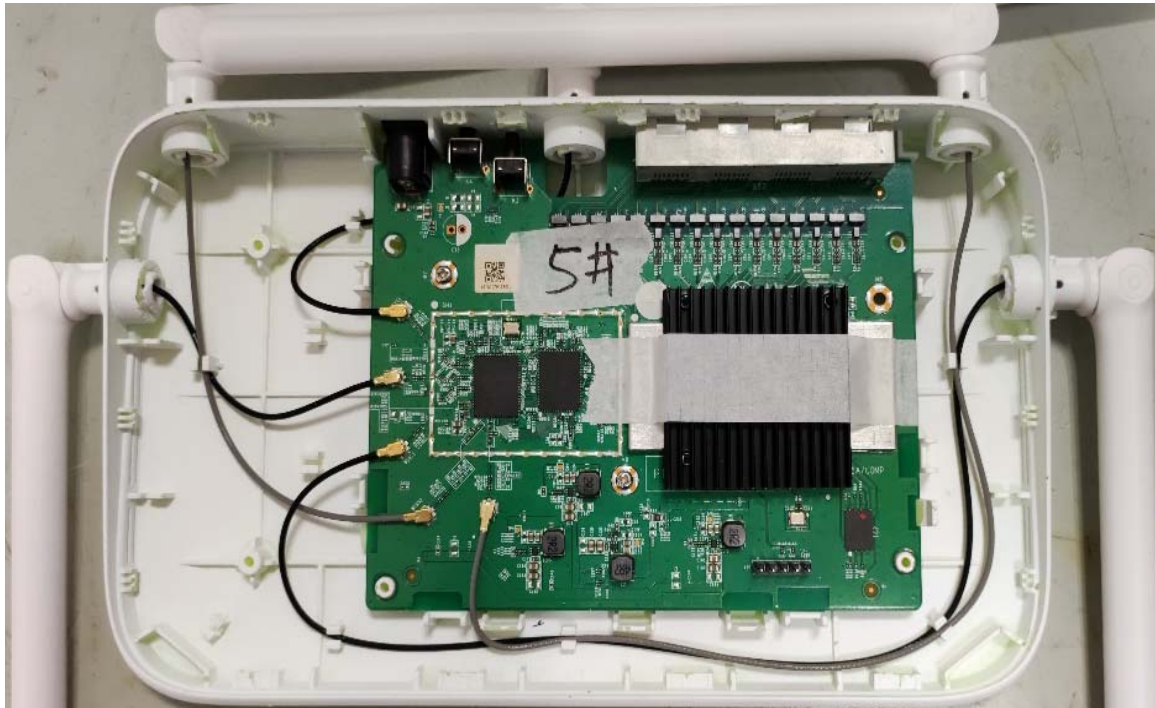
天线塑胶材质		
杆套	铆钉	转轴
ABS/PC ABS	POM	PC

- 1, 天线图纸需经过烽火 UED 审核;
- 2, 天线塑壳需经过烽火 UED 封样后方可量产;
- 3, 使用原材料需提供明确厂家牌号, 更换牌号需重新报备并测试通过后方可使用。

4，特殊原因需变更部件材质时，需报备并测试通过后方可使用。

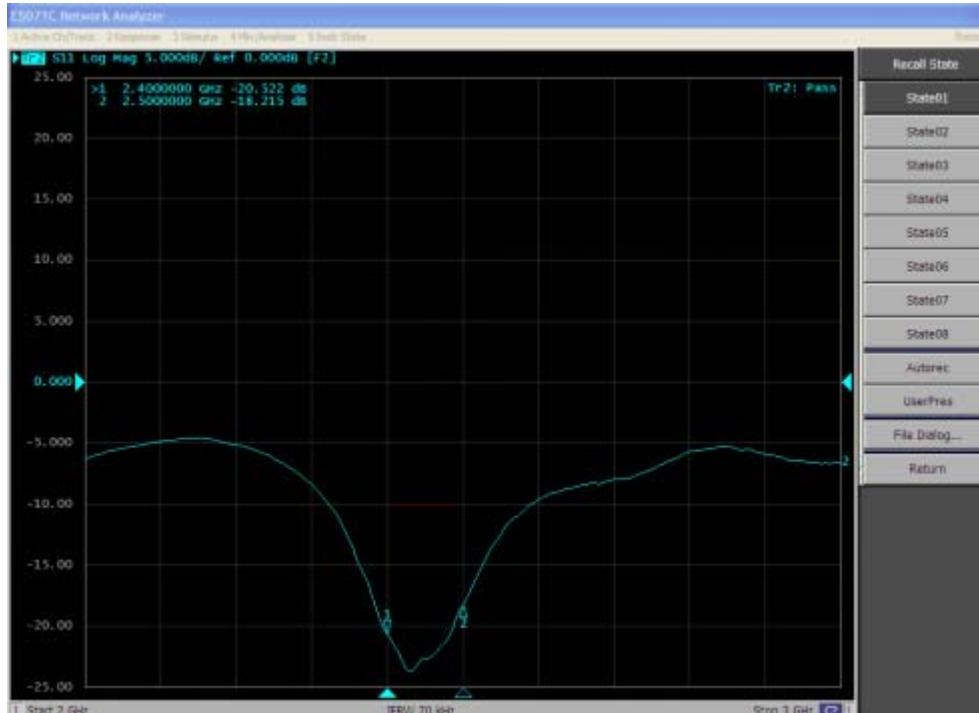
三、 Details of the antenna and the whole machine (including the antenna body, the relative position of the antenna and the whole machine

setting, etc.)

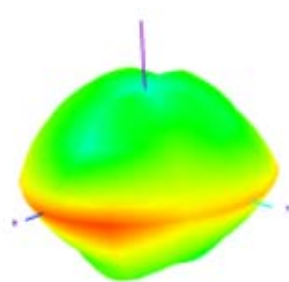


四、Test Report

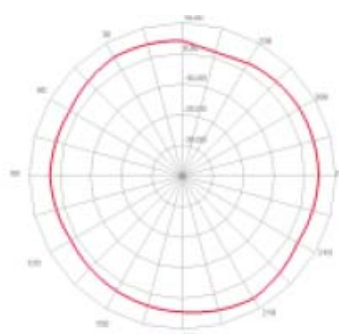
3.1: S11, S21 parameters



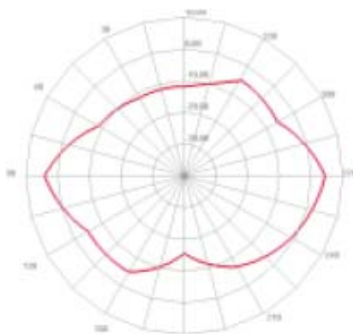
3.2: 3D、2D Raditation Pattern



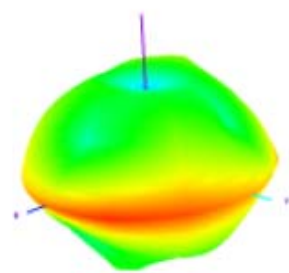
2.4GHz



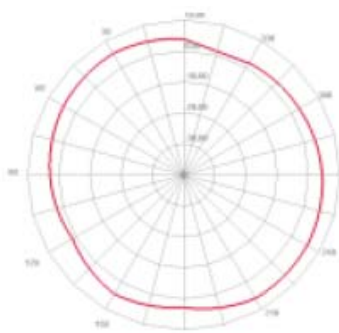
Gain(pPeak):5.32dBi



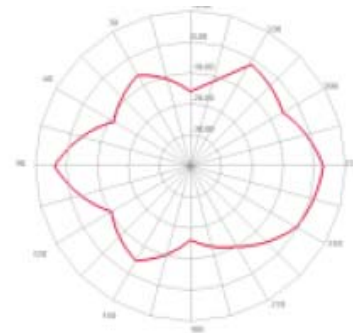
Efficiency:77.93



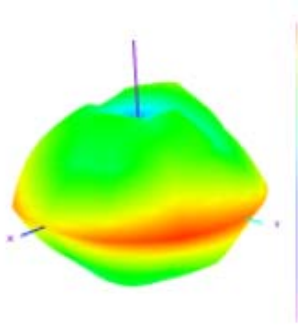
2.45GHz



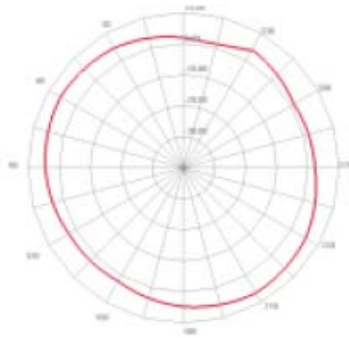
Gain(pPeak):5.09dBi



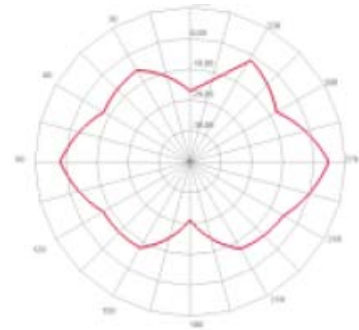
Efficiency:76.45



2.5GHz



Gain(pPeak):5.13dBi



Efficiency:76.23

五、 List of Raw Materials /ROHS

serial number	key raw materials	raw material
1	1.37 wire	Silver Plated Copper/FEP/Tin Plated Copper
2	lower mount	PC+PBT
3	rod cover	ABS
4	rivet	POM
5	PCB	FR-4
6	terminal	Phosphor bronze+PBT
7	foam	Eva
8	spring	brass

六、Reliability Test

The conclusion of the external antenna structure reliability test item (the report is attached separately):

Test items	Test Results	Remark
Material flame retardant inspection	PASS	
Plastic structure matching inspection	PASS	
Antenna Pulling Force Test	PASS	
External Antenna Operation Check	PASS	
Alternating Damp Heat Test	PASS	
temperature cycle test	PASS	
Antenna Strength Test	PASS	
Salt spray resistance test	PASS	
External antenna torque interfit test (shell and antenna shaft)	PASS	

七、Package

